



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET, S.W.
ATLANTA, GEORGIA 30303-8960

January 25, 2018

(b)(6)

SUBJ: EPA Asbestos Removal at 303 Houston Street

Dear (b)(6):

Enclosed, you will find the Removal Action Status Report for the property located at 303 Houston Street in Davidson, North Carolina. The report summarizes information regarding the original asbestos sampling, a description of the Removal Action conducted on the property, a summary of multimedia sampling results, details on the restoration of the property and the timeframe of the Removal Action. We have also included a figure of the removal area and the air sampling locations, a table of the air sampling results and photographs of the removal activities.

The removal activities have been completed and there are no further actions needed on the above-mentioned property. If you have any questions or need further information, please do not hesitate to contact Jordan Garrard, US EPA, Federal On-Scene Coordinator directly at (678) 644-8648, via email: garrard.jordan@epa.gov or myself directly at (678) 575-8132, via email: miller.angela@epa.gov, at any time.

It was such a pleasure working with you and your community. Thank you for your cooperation and patience throughout the removal activities.

Sincerely,

A handwritten signature in black ink, appearing to read "Angela R. Miller", is written over a horizontal line.

Angela R. Miller, US EPA
Community Involvement Coordinator

Enclosure(s)

cc: Jordan Garrard, US EPA, Federal On-Scene Coordinator
Miguel Alvalle, NC DEQ

REMOVAL ACTION STATUS REPORT DAVIDSON ASBESTOS

Property Address: 303 Houston Street, Davidson, Mecklenburg County, North Carolina

Original Asbestos Sampling Information: Surface soil samples were collected at a depth of 0 to 3 inches below ground surface (bgs) and subsurface soil samples were collected at a depth of 3 to 6 inches bgs. Analytical results are reported in increments of 0.25 percent asbestos. Those samples with analytical results reported as “trace” (less than 0.25 percent asbestos) were further analyzed by fluidized bed analysis and reported in soil concentrations of phase contrast microcopy equivalent (PCME) structures per gram (s/g) of soil.

Property Address	Area Sampled	Surface Soil Results (percent asbestos) 0-3 inches deep	Subsurface Soil Results (percent asbestos) 3-6 inches deep
303 Houston Street	Front Yard	No Asbestos Detected	0.0 s/g
	Back Yard	No Asbestos Detected	No Asbestos Detected

Description of Removal Action: The soil was excavated to an approximate maximum depth in the following areas: portions of the front yard and driveway along Houston Street to 12 inches; tree line area along Houston Street and residential drip lines to 2 inches; and, the western side of the residence to 3 inches (see Appendix 1). Visual inspections of the areas excavated for asbestos-containing materials (ACM) were conducted by a State of North Carolina-accredited asbestos inspector and air monitor. Additional removal was conducted in those areas where ACM were still visibly present. Once ACM was no longer visibly present, restoration of the excavated areas was allowed to commence.

Summary of Multimedia Sampling Results: Perimeter air sampling was conducted at two stationary locations during removal activities June 19, 2017. Air sampling was conducted these locations based on wind direction and removal activities. The analytical results were less than the limit of detection and ranged from less than 0.00073 fibers per cubic centimeter (f/cc) to less than 0.00099 f/cc (see Table 1 in Appendix 2). On June 19 and August 7, 2017, a 6-point composite soil sample was collected from the excavated front yard and the driveway and a 5-point composite soil sample was collected from the western side of the residence, before restoration began and the analytical results indicated no asbestos detected (see Table 2 in Appendix 2).

Perimeter air and composite soil samples were collected by a State of North Carolina-accredited air monitor with oversight from a State of North Carolina-accredited supervising air monitor (SAM).

Restoration of Property: Restoration work included installation of snow fencing on top of the subsurface of the excavated front yard and driveway, backfill, topsoil, and sod in the excavated front yard area, rock in the driveway, around the tree line, and in the northern portion of the western side of the residence, and topsoil and sod on the southern portion of the western side of the residence. All areas were restored to the original height of the surrounding grade.

REMOVAL ACTION STATUS REPORT DAVIDSON ASBESTOS

Time Frame of Removal Action: Removal activities began and were completed on June 19 and August 7, 2017.

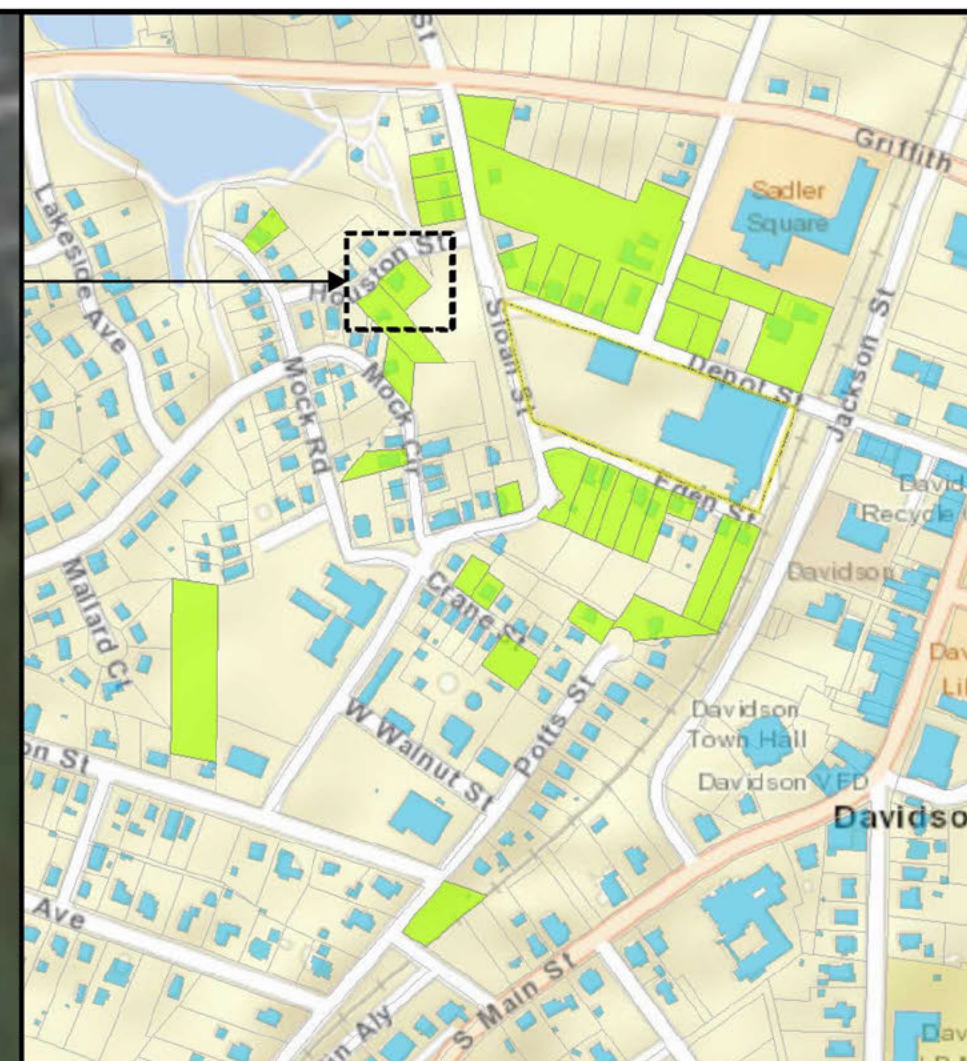
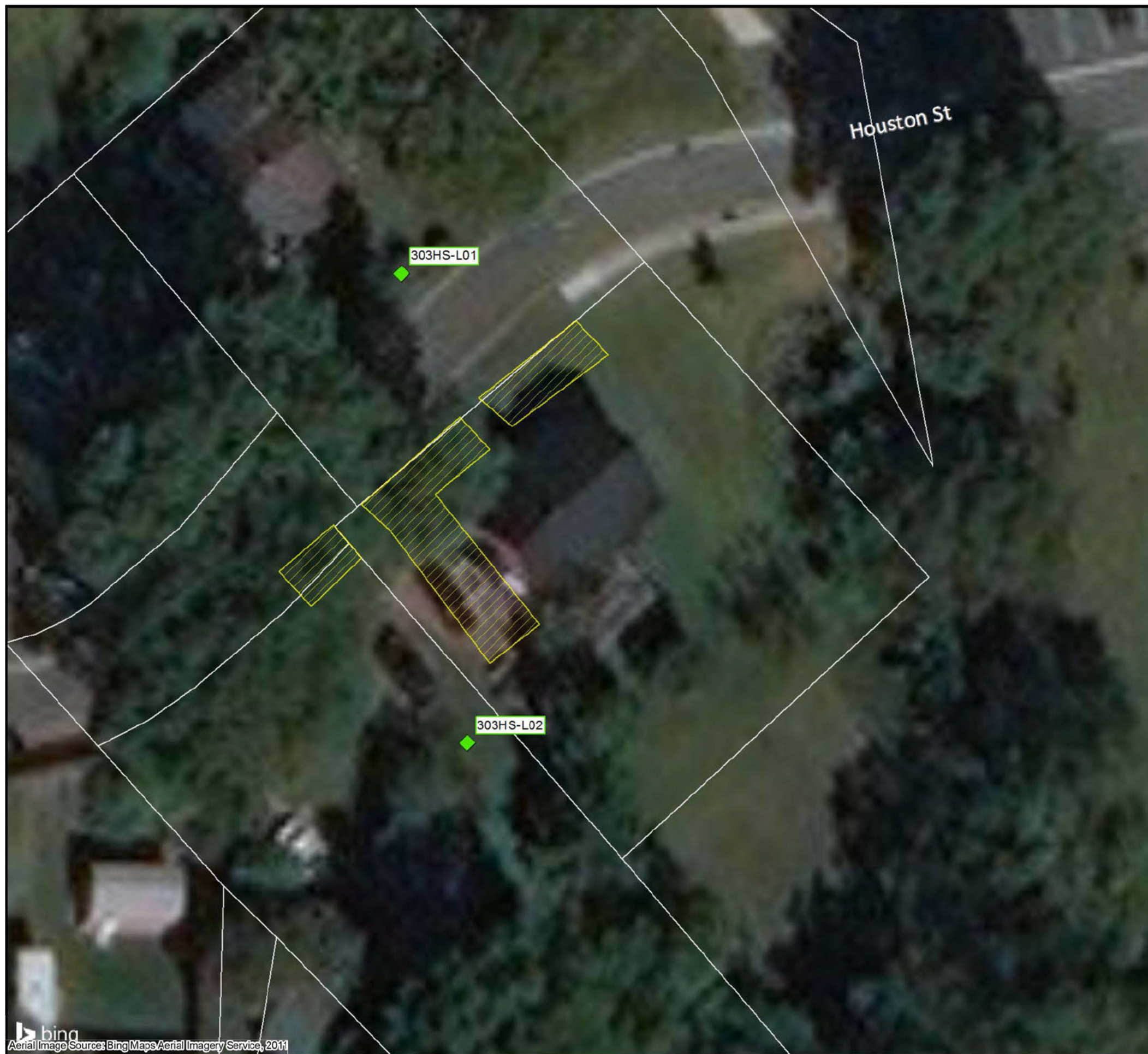
Appendices to this report include:

1. Figure of removal area and air sampling locations
2. Table of air sampling results
3. Photographic log of removal activities


APPENDIX 1

FIGURE



(One Page)



Legend

-  Air Sample
-  Removal Area
-  Parcel Boundary

Inset Map

-  *Parcels with Removal Activities*
-  Building/Structure



Map Sources:
Aerial Imagery, Bing Maps, 2012-2014;
Parcels, <http://maps.co.mecklenburg.nc.us>



United States
Environmental Protection Agency
Region 4

FIGURE 1

Removal Areas and
Air Sampling Locations

TDD Name: Davidson Asbestos

TDD No.: TT-01-071

City:	County:	State:
Davidson	Mecklenburg	North Carolina



Date:
12/7/2017
Analyst:
dale.vonbusch

303 Houston Street

APPENDIX 2
SUMMARY TABLE OF ANALYTICAL RESULTS
(Two Pages)

TABLE 1
TRANSMISSION ELECTRON MICROSCOPY RESULTS
DAVIDSON ASBESTOS
DAVIDSON, MECKLENBURG COUNTY, NORTH CAROLINA

Sample Id	Location	T	Pump No.	Time Start	Time Stop	Total (Min)	Pump Flow Rate (lpm)			Total Sample Volume (l)	PCM Results (f/cc)	Asbestos Fibers Detected	TEM Results in PCME (f/cc)
							Initial	Final	Average				
DA-303HS-AA-L01-061917	303 Houston Street - Location 1	AA	G6	11:06	16:49	343	11.65	11.71	11.68	4006.2	0.00073	0	<0.00073
DA-303HS-AA-L02-061917	303 Houston Street - Location 2	AA	G1	11:14	16:55	341	11.70	11.56	11.63	3965.8	0.00099	0	<0.00099

Notes:

<: Less than
AA: Area air sampling
DA: Davidson Asbestos
f/cc: Fibers per cubic centimeter
HS: Houston Street
Id: Identification

l: Liters
lpm: Liters per minute
Min: Minutes
PCM: Phase contrast microscopy
PCME: Phase contrast microscopy equivalent
TEM: Transmission electron microscopy

TABLE 2
SOIL SAMPLING RESULTS
DAVIDSON ASBESTOS
DAVIDSON, MECKLENBURG COUNTY, NORTH CAROLINA

Sample Id	Sample Location	Date Sampled	Type of Sample	Percent Asbestos Detected By Visual Estimate	Percent Asbestos Detected By Point Count*
DA-303HS-AS-061917	303 Houston Street	6/19/2017	Composite (6 pt)	NAD	NAD
DA-303HS-AS-080717	303 Houston Street	8/7/2017	Composite (5 pt)	NAD	NAD

Notes:

<: Less than

AS: Asbestos soil sample

DA: Davidson Asbestos

HS: Houston Street

Id: Identification

NAD: No asbestos detected

pt: Point

APPENDIX 3
PHOTOGRAPHIC LOG
(Eight Pages)



OFFICIAL PHOTOGRAPH NO. 1
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: South

Date: June 19, 2017

Photographer: Paul Prys, Tetra Tech, Inc. (Tetra Tech)

Witness: None

Subject: The Emergency and Rapid Response Services (ERRS) contractor, Environmental Restoration, LLC (ER), used an excavator and hand tools to remove asbestos-containing materials (ACM) and asbestos-contaminated soil from the driveway located at 303 Houston Street. ER used hoses to wet the asbestos-contaminated soil during removal activities.



OFFICIAL PHOTOGRAPH NO. 2
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: Southwest

Date: June 19, 2017

Photographer: Paul Prys, Tetra Tech, Inc. (Tetra Tech)

Witness: None

Subject: ER used an excavator and hand tools to remove ACM and asbestos-contaminated soil from the front yard located at 303 Houston Street. ER used hoses to wet the asbestos-contaminated soil during removal activities.



OFFICIAL PHOTOGRAPH NO. 3
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: Southeast

Date: August 7, 2017

Photographer: Paul Prys, Tetra Tech, Inc. (Tetra Tech)

Witness: None

Subject: ER used an excavator and hand tools to remove ACM and asbestos-contaminated soil from the western side of the property located at 303 Houston Street. ER used hoses to wet the asbestos-contaminated soil during removal activities.



OFFICIAL PHOTOGRAPH NO. 4
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: North

Date: June 19, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: Perimeter air sampling was conducted by a Tetra Tech Superfund Technical Assessment and Response Team (START), State of North Carolina-accredited air monitor, to evaluate the effectiveness of engineering and safety controls in preventing the off-site migration of asbestos fibers during removal activities.



OFFICIAL PHOTOGRAPH NO. 5
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: South

Date: June 19, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: ER installed snow fencing along the subsurface of the excavated front yard and driveway areas after the visual inspection conducted by Tetra Tech START, State of North Carolina-accredited asbestos inspector and air monitor, resulted in no visible ACM in the excavated area.



OFFICIAL PHOTOGRAPH NO. 6
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: South

Date: June 20, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: ER used dump trucks, skid steers, and hand tools to install topsoil in the excavated front yard area and rock around the tree line.



OFFICIAL PHOTOGRAPH NO. 7
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number:	TT-01-071	Location:	Davidson Asbestos
Orientation:	Southeast	Date:	June 20, 2017
Photographer:	Paul Prys, Tetra Tech	Witness:	None
Subject:	ER used dump trucks and skid steers to install rock in the excavated driveway.		



OFFICIAL PHOTOGRAPH NO. 8
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number: TT-01-071

Location: Davidson Asbestos

Orientation: North

Date: August 7, 2017

Photographer: Paul Prys, Tetra Tech

Witness: None

Subject: ER installed rock in the northern portion of and topsoil and sod in the southern portion of the western side of the residence after the visual inspection conducted by Tetra Tech. START, State of North Carolina-accredited asbestos inspector and air monitor, detected no visible ACM in the excavated area.